

### REMARKS

Claims 1 to 30 are pending in this application of which claims 1, 11 and 21 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Initially, the Examiner objected to the drawings allegedly because the description did not include reference numbers "40", "41", "43" and "45" in the description. Applicant respectfully traverses this rejection. The reference numbers "40", "41", "43" and "45" are found on page 9 on lines 8, 11, 16, and 18 respectively. Applicant respectfully requests withdrawal of this objection.

The Examiner did not accept the color drawings because a petition was allegedly not filed. Applicant notes that a petition meeting the requirements of 37 C.F.R. 1.84(a)(2) was filed with the application. A copy of the petition is enclosed, together with three additional sets of color drawings. Approval thereof is respectfully requested.

Claims 3, 4, 13, 14, 23 and 24 are rejected under 35 U.S.C. § 112, first paragraph, because the Examiner alleges that the terms "first direction" and "second direction" are not clear. Applicant respectfully traverses this rejection. Applicant has defined both directions in the specification, e.g., an X direction and a -X direction (see page 9, lines 16 to 22 of the specification). Accordingly, Applicant respectfully requests withdrawal of this rejection.

Turning to the art rejections, claims 1 to 4, 6 to 14, 16 to 24 and 26 to 30 were rejected under 35 U.S.C. § 103 over Hall et al. (U.S. Publication 2002/0130807) in view of Talwar (U.S. Patent No. 4,952,193). As shown above, Applicant has amended the claims to define the

invention more clearly. In view of these amendments, withdrawal of the art rejection is respectfully requested.

Claim 1, as amended, is directed to a method of identifying data loss in a transmission system. The method includes shifting one of a received waveform and a transmitted waveform. The transmitted waveform is a first signal that is transmitted from a transmitter to a receiver over a transmission medium. The received waveform is a second signal that is received by the receiver from the transmitter over the transmission medium. The method also includes determining differences between the transmitted and received waveforms at various shift points, and identifying a smallest of the differences between the transmitted and received waveforms.

The applied art is not understood to disclose or suggest the foregoing features of claim 1. In particular, neither Hall nor Talwar, taken separately or in combination, disclose or suggest “determining differences between the transmitted and received waveforms at various shift points”, “the transmitted waveform being a first signal that is transmitted from a transmitter to a receiver over a transmission medium”, and “the received waveform being a second signal that is received by the receiver from the transmitter over the transmission medium.”

Specifically, Hall does not use a transmitted waveform but instead determines differences in received waveforms. For example, Hall describes receiving two pulse trains at the same time and performing a cross-correlation (see paragraph [0071] of Hall). However, neither one of these pulse trains is the transmitted waveform. Applicant has distinguished a received waveform from the transmitted waveform in the specification and in amended claim 1 by defining the transmitted waveform as a first signal that is transmitted from a transmitter to a receiver over a

medium and the received waveform as a second signal that is received by the receiver from the transmitter over the medium. This difference between the two waveforms comprises the system delay (see page 3, line 18 to page 4, line 3 of the specification) and is not shown in Hall.

Talwar describes receiving an interfering signal, a received signal, a sample signal and a secondary sample signal (see column 6, line 65 to page 7, line 7 of Talwar). However, neither one of these signals is a transmitted waveform as that term is used in the subject application. Therefore, Talwar does not disclose transmitted waveforms, much less determining differences between the transmitted and received waveforms at various shift points.

Even if Hall and Talwar were combined, none of the features of the hypothetical combination discloses or suggests determining differences between the transmitted and received waveforms at various shift points, where the transmitted waveform is a first signal that is transmitted from a transmitter to a receiver over a transmission medium and the received waveform is a second signal that is received by the receiver from the transmitter over the medium. For at least the foregoing reasons, Applicant requests withdrawal of the art rejection.

Claims 11 and 21 roughly correspond to claim 1. Accordingly, claims 11 and 21 are believed to be allowable for at least the same reasons noted above with respect to claim 1.

In view of the foregoing amendments and remarks, Applicant submits that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

All correspondence should be directed to the below address. Applicant's attorney can be reached by telephone at the number shown below.

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No fee is believed to be due for this Response; however, if any fees are due (including fees associated with the enclosed Petition), please apply such fees to Deposit Account No. 06-1050 referencing Attorney Docket 10559-421001.

Respectfully submitted,

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